

INTERNATIONAL SEARCH REPORT

IB2004/051275

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B01D53/00 B01D53/92 C02F1/32 B01J19/12 F01N3/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B01D C02F B01J F01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 194 821 B1 (NAKAMURA MASARU) 27 February 2001 (2001-02-27) column 1, lines 44-53; claims 1-9 column 6, line 44 - column 7, line 5 column 10, lines 46-55 column 14, lines 12-31	1
A	DE 43 27 081 A (UNIV SCHILLER JENA) 16 February 1995 (1995-02-16) column 1, lines 6-11 column 2, lines 26-33 column 2, lines 57-61	2-10
A	DE 43 07 204 A (UNIV SCHILLER JENA) 15 September 1994 (1994-09-15) column 2, line 63 - column 3, line 3; claims 1-9 column 3, lines 31-37	1-10
		-/-



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the International filing date but later than the priority date claimed

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- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the International search

11 October 2004

Date of mailing of the International search report

19/10/2004

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IB2004/051275

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 195 07 189 A (STENGELIN GMBH & CO KG) 12 September 1996 (1996-09-12) column 11, lines 12-20; claims 1-29 -----	1-10
A	EP 1 195 185 A (YAMAHA CORP) 10 April 2002 (2002-04-10) paragraphs '0151! - '0153!; claims 1-11 -----	1-10
A	DE 197 12 305 A (DUESSELDORFER CONSULT GMBH) 1 October 1998 (1998-10-01) claims 1-23 -----	1-10
A	US 6 047 543 A (CHRISTELLER DAVID ET AL) 11 April 2000 (2000-04-11) cited in the application the whole document -----	1-10
A	WO 97/22794 A (LITEX INC ; LOCKHEED CORP (US)) 26 June 1997 (1997-06-26) cited in the application the whole document -----	1-10

INTERNATIONAL SEARCH REPORT

IB2004/051275

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 6194821	B1	27-02-2001	JP	10216716 A		18-08-1998
			JP	11191396 A		13-07-1999
			JP	3282798 B2		20-05-2002
			JP	11329365 A		30-11-1999
			JP	11319816 A		24-11-1999
			CA	2244645 A1		26-06-1999
			DE	19836619 A1		12-08-1999
DE 4327081	A	16-02-1995	DE	4327081 A1		16-02-1995
DE 4307204	A	15-09-1994	DE	4307204 A1		15-09-1994
DE 19507189	A	12-09-1996	DE	19507189 A1		12-09-1996
EP 1195185	A	10-04-2002	JP	3480440 B2		22-12-2003
			JP	2002113302 A		16-04-2002
			JP	2002113461 A		16-04-2002
			CN	1349931 A		22-05-2002
			EP	1195185 A1		10-04-2002
			US	2002060186 A1		23-05-2002
DE 19712305	A	01-10-1998	DE	19712305 A1		01-10-1998
			DE	29707912 U1		21-08-1997
US 6047543	A	11-04-2000	US	6029442 A		29-02-2000
			US	5863413 A		26-01-1999
			AU	5542999 A		14-02-2000
			CA	2338261 A1		03-02-2000
			EP	1101018 A2		23-05-2001
			JP	2002530181 T		17-09-2002
			WO	0004989 A2		03-02-2000
			US	6357223 B1		19-03-2002
			AU	9603098 A		27-04-1999
			BR	9813853 A		19-09-2000
			CA	2305238 A1		15-04-1999
			CN	1281528 T		24-01-2001
			DE	1021643 T1		19-04-2001
			EP	1021643 A1		26-07-2000
			JP	2001519497 T		23-10-2001
			WO	9918333 A1		15-04-1999
			US	6330794 B1		18-12-2001
			US	6321531 B1		27-11-2001
			ZA	9809145 A		20-10-1999
			US	6048500 A		11-04-2000
			US	6264899 B1		24-07-2001
			US	2001028869 A1		11-10-2001
WO 9722794	A	26-06-1997	US	5692481 A		02-12-1997
			US	5806305 A		15-09-1998
			AU	726650 B2		16-11-2000
			AU	1347997 A		14-07-1997
			BR	9612085 A		28-12-1999
			CA	2241110 A1		26-06-1997
			CN	1289005 A		28-03-2001
			CN	1209190 A		24-02-1999
			EP	0868605 A2		07-10-1998
			JP	2001508514 T		26-06-2001
			RU	2168053 C2		27-05-2001

INTERNATIONAL SEARCH REPORT

IB2004/051275

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9722794	A	WO 9722794 A2	26-06-1997
		US 6012283 A	11-01-2000
		US 6253544 B1	03-07-2001
		US 6048500 A	11-04-2000
		US 6264899 B1	24-07-2001
		US 5863413 A	26-01-1999
		US 2001028869 A1	11-10-2001